

CONTENTS OF VOLUME 45

Number 1

- 1 Cellulosic associative thickeners
L. -M. ZHANG (GUANGZHOU, PEOPLES REPUBLIC OF CHINA)
- 11 Macromolecular characterisation of three barley β -glucan standards by size-exclusion chromatography combined with light scattering and viscometry: an inter-laboratory study
B. E. CHRISTENSEN, A.-S. ULSET (TRONDHEIM, NORWAY), M. U. BEER (NEUENEGG, SWITZERLAND), B. E. KNUCKLES (ALBANY, CA, USA), D. L. WILLIAMS (JOHNSON CITY, TN, USA), M. L. FISHMAN, H. K. CHAU (WYNDMOOR, PA, USA) & P. J. WOOD (GUELPH, CANADA)
- 23 Molecular simulation of host–guest inclusion compounds: an approach to the lactodendrimers case
S. PRICL & M. FERMEGLIA (TRIESTE, ITALY)
- 35 Chitosan-oxychitin coatings for prosthetic materials
R. A. A. MUZZARELLI, G. BIAGINI, A. DEBENEDITTIS, P. MENGUCCI, G. MAJNI & G. TOSI (ANCONA, ITALY)
- 43 Starch derivatives of high degree of functionalization. Part 2. Determination of the functionalization pattern of *p*-toluenesulfonyl starch by peracylation and NMR spectroscopy
R. DICKE, K. RAHN, V. HAACK & T. HEINZE (JENA, GERMANY)
- 53 Thermogravimetry/mass spectrometry study of weakly basic starch-based ion exchanger
I. SIMKOVIC (BRATISLAVA, SLOVAKIA) & E. JAKAB (BUDAPEST, HUNGARY)
- 61 Drag-reduction effectiveness of xanthan gum in a rotating disk apparatus
J.-I. SOHN (CHUNCHON, SOUTH KOREA), C. A. KIM, H. J. CHOI (INCHON, SOUTH KOREA) & M. S. JHON (PITTSBURGH, PA, USA)
- 69 Two-dimensional NMR spectroscopic studies of fenugreek (*Trigonella foenum-graecum* L.) galactomannan without chemical fragmentation
H. P. RAMESH, K. YAMAKI, H. ONO & T. TSUSHIDA (IBARAKI, JAPAN)
- 79 Degradation of starch by polarised light
M. FIEDOROWICZ, P. TOMASIK (CRACOW, POLAND) & C. Y. LII (TAIPEI, TAIWAN)
- 89 Electrosynthesis of potato starch–whey protein isolate complexes
H. ZALESKA (CRACOW, POLAND), S. RING (NORWICH, UK) & P. TOMASIK (CRACOW, POLAND)
- 95 Preparation and swelling of polymeric absorbent containing hydroxamic acid group from polymer grafted sago starch
M. R. LUTFOR, S. SIDIK, W. M. Z. WAN YUNUS, M. Z. AB RAHMAN, A. MANSOOR & H. JELAS (SELANGOR, MALAYSIA)

Short Communication

- 101 Calcium complexation by low molecular weight dicarboxycellulose in aqueous solution
A. J. VARMA & V. B. CHAVAN (PUNE, INDIA)

Book Reviews

- 105 Recent Progress in Bioconversion of Lignocellulosics

- 105 Protective Groups in Organic Synthesis (3rd Edition)
- 106 Handbook of Cereal Science and Technology, 2nd Edition, Revised and Expanded
- 106 Antioxidants in Muscle Foods
- 107 Biosensors for Food Analysis
- 107 Handbook of Reagents for Organic Synthesis
- 109 Bibliography
- 119 Calendar

Number 2

- 121 Preface
- 123 Synthesis of novel polyurethanes from sugars and 1,6-hexamethylene diisocyanate
R. GARÇON, C. CLERK, J.-P. GESSON (POITIERS, FRANCE), J. BORDADO, T. NUNES, S. CAROÇO,
P. T. GOMES, M. E. MINAS DA PIEDADE & A. P. RAUTER (LISBOA, PORTUGAL)
- 129 Synthesis of fused azole-piperidinoses
J. MARCO-CONTELLERES & C. A. JIMÉNEZ (MADRID, SPAIN)
- 135 Synthesis of carbohydrate based polymers
M. J. CARNEIRO, A. FERNANDES, C. M. FIGUEIREDO, A. G. FORTES & A. M. FREITAS (BRAGA,
PORTUGAL)
- 139 Catalytic transfer hydrogenation of sugar derivatives
L. JICSINSZKY & R. IVÁNYI (BUDAPEST, HUNGARY)
- 147 Spacer arm influence on glucidoamphiphile compound properties
G. GOETHALS (AMIENS, FRANCE), A. FERNÁNDEZ (VENEZUELA), P. MARTIN (AMIENS, FRANCE),
M. MIÑANA-PÉREZ, C. SCORZA (VENEZUELA), P. VILLA & P. GODÉ (AMIENS, FRANCE)
- 155 Characterisation of a sugar fraction from *Sarcocephalus latifolius* stem bark extract
P. ABREU (CAPARICA, PORTUGAL), A. PEREIRA (ÉVORA, PORTUGAL) & A. RELVA (CAPARICA,
PORTUGAL)
- 161 Effect of small carbohydrates on the catalytic activity of a protease and two glycohydrolases
M. MEJRI & M. MATHLOUTHI (REIMS, FRANCE)
- 169 Changes in high and low molecular weight carbohydrates during *Rhizopus nigricans* cultivation on lemon
peel
P. HELLÍN, J. M. ROS & J. LAENCINA (MURCIA, SPAIN)
- 175 Use of FT-IR spectroscopy to follow the effect of processing in cell wall polysaccharide extracts of a sun-
dried pear
D. FERREIRA, A. BARROS, M. A. COIMBRA & I. DELGADILLO (AVEIRO, PORTUGAL)
- 183 Thermoplastic starch–cellulosic fibers composites: preliminary results
A. A. S. CURVELO, A. J. F. DE CARVALHO & J. A. M. AGNELLI (SÃO CARLOS, BRAZIL)
- 189 A first insight on composites of thermoplastic starch and kaolin
A. J. F. DE CARVALHO, A. A. S. CURVELO & J. A. M. AGNELLI (SÃO CARLOS, BRAZIL)
- 195 Portuguese Carbohydrate Chemistry Group Of The Portuguese Society Of Chemistry
A. P. RAUTER (LISBON, PORTUGAL)
- 197 Bibliography
- 207 Calendar

Number 3

- 209 Humidity-induced structural transitions in amylose and amylopectin films
M. STADING, Å. RINDLAV-WESTLING & P. GATENHOLM (GÖTEBORG, SWEDEN)
- 219 An experimental study on the carboxymethylation of granular potato starch in non-aqueous media
C. J. TIJSEN, H. J. KOLK, E. J. STAMHUIS & A. A. C. M. BEENACKERS (GRONINGEN, NETHERLANDS)
- 227 Conformational stability of ferricytochrome *c* near the heme in its complex with heparin in alkaline pH
J. BÁGEL'OVÁ, Z. GAŽOVÁ, E. VALUŠOVÁ & M. ANTALIK (KOŠICE, SLOVAKIA)
- 233 Interactions of a hydrophobically modified cationic cellulose ether derivative with amphiphiles of like charge in an aqueous environment
S. E. BURKE & R. PALEPU (ANTIGONISH, CANADA)
- 245 NMR study of a novel chitosan-based hydrogel
D. CAPITANI, A. A. DE ANGELIS, V. CRESCENZI, G. MASCI & A. L. SEGRE (ROME, ITALY)
- 253 Composition, molecular structure, and physicochemical properties of tuber and root starches: a review
R. HOOVER (ST. JOHN'S, CANADA)
- 269 Thermal and enzymatic treatments for the release of free ferulic acid from maize bran
L. SAULNIER, C. MAROT, M. ELGORRIAGA, E. BONNIN & J.-F. THIBAUT (NANTES, FRANCE)
- 277 Characterisation of a novel gel system containing pectin, heat inactivated pectin methylesterase and NaCl
T. SCHMELTER, R. VREEKER & W. KLAFFKE (VLAARDINGEN, NETHERLANDS)
- 285 Characterisation of polysaccharides synthesised by *Gluconobacter oxydans* NCIMB 4943
I. M. SIMS, A. THOMSON, U. HUBL (LOWER HUTT, NEW ZEALAND), N. G. LARSEN (CHRISTCHURCH, NEW ZEALAND) & R. H. FURNEAUX (LOWER HUTT, NEW ZEALAND)
- 293 Characterization of METHOCEL cellulose ethers by aqueous SEC with multiple detectors
C. M. KEARY (MIDLAND, MI, USA)

Book Reviews

- 305 Starches
- 305 Human Biology, Third Edition
- 306 Molecular and Supramolecular Chemistry of Natural Products and their Model Compounds
- 307 Trends in Carbohydrate Chemistry
- 309 Bibliography
- 313 Calendar

Number 4

- 315 Polysaccharides from grape berry cell walls. Part I: tissue distribution and structural characterization of the pectic polysaccharides
S. VIDAL, P. WILLIAMS (MONTPELLIER, FRANCE), M. A. O'NEILL (ATHENS, GA, USA) & P. PELLERIN (MONTPELLIER, FRANCE)
- 325 Extraction, purification and chemical characterisation of xylogalacturonans from pea hulls
A. LE GOFF (NANTES, FRANCE), C. M. G. C. RENARD (LE RHEU, FRANCE), E. BONNIN & J.-F. THIBAUT (NANTES, FRANCE)

- 335 Gelatinisation of sago starch in the presence of sucrose and sodium chloride as assessed by differential scanning calorimetry
A. G. MAAURF, Y. B. CHE MAN (SERDANG, MALAYSIA), B. A. ASBI, A. H. JUNAINAH (PETALING JAYA, MALAYSIA) & J. F. KENNEDY (BIRMINGHAM, UK)
- 347 Functional properties of pregelatinized and cross-linked cassava starch obtained by extrusion with sodium trimetaphosphate
E. H. NABESHIMA & M. V. E. GROSSMANN (LONDRINA-PR, BRAZIL)
- 355 The effect of autoclaving on the dispersibility and stability of three neutral polysaccharides in dilute aqueous solutions
Q. WANG, P. J. WOOD, W. CUI (GUELPH, CANADA) & S. B. ROSS-MURPHY (LONDON, UK)
- 363 Melting behaviour of schizophyllan extracellular polysaccharide gels in the temperature range between 5 and 20°C
A. BOT, H. E. SMORENBURG, R. VREEKER, M. PÂQUES (VLAARDINGEN, THE NETHERLANDS) & A. H. CLARK (BEDFORD, UK)
- 373 Hydrodynamic studies on chitosans in aqueous solution
H. CÖLFEN (GOLM, GERMANY), G. BERTH (POTSDAM, GERMANY) & H. DAUTZENBERG (GOLM, GERMANY)
- 385 CoSalen immobilized to chitosan and its electrochemical behavior
D. D. HU, Q. Z. SHI, Z. X. TANG, Y. FANG (XI'AN, PEOPLE'S REPUBLIC OF CHINA) & J. F. KENNEDY (BIRMINGHAM, UK)
- 395 Correlation between sagging and shear elasticity in pectin, gelatin and polyacrylamide gels
H. NIELSEN (ROSKILDE, DENMARK), B. U. MARR (LILLE SKENSVED, DENMARK) & S. HVIDT (ROSKILDE, DENMARK)
- 403 Encapsulation of sunflower oil in starch matrices via extrusion: effect of the interfacial properties and processing conditions on the formation of dispersed phase morphologies
G. YILMAZ, R. O. J. JONGBOOM, H. FEIL (WAGENINGEN, THE NETHERLANDS) & W. E. HENNINK (UTRECHT, THE NETHERLANDS)
- 411 Bibliography
- 415 Calendar